## National Transportation Safety Board NTSB ID: DEN02LA099 Aircraft Registration Number: N219DF FACTUAL REPORT Occurrence Date: 08/20/2002 Most Critical Injury: None Occurrence Type: Accident Investigated By: NTSB ETYBO Location/Time Nearest City/Place State Zip Code Local Time Time Zone CO 80516 1045 MDT Erie Distance From Landing Facility: Direction From Airport: Airport Proximity: On Airport Aircraft Information Summary Aircraft Manufacturer Model/Series Type of Aircraft Hildebrandt Rutan/Defiant Airplane

## Narrative

Sightseeing Flight: No

Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:

On August 20, 2002, at 1045 mountain daylight time, a Hildebrandt Rutan Defiant, N219DF, was substantially damaged when it collided with terrain during a rejected takeoff at Erie Airpark, Erie, Colorado. The private pilot and one passenger were not injured. Day visual meteorological conditions prevailed, and no flight plan had been filed for the personal flight being conducted under Title 14 CFR Part 91. The flight was originating at the time of the accident.

Air Medical Transport Flight: No

The following is based on a telephone interview with the pilot shortly after the accident, and the accident report he submitted. The pilot was taking off on runway 15. Power was applied to the rear engine, followed by power application to the forward engine. The airplane accelerated "slower than usual" and when the airplane was halfway down the runway, he elected to reject the takeoff. The pilot said he "couldn't rotate the airplane...it seemed to require more back pressure...it didn't seem right." He retarded power to both engines to idle and applied brakes. "The brakes seemed to grab at first, but then had no effect," he wrote. The pilot retarded the mixtures. The airplane went off the end of the runway and traveled 500 feet across rough terrain, collapsing the nose landing gear and bending the fairing. According to an FAA inspector who examined the airplane, the "Rhino" rudder and the engine cowling were crushed and the propeller was bent.

The pilot said the fixed base operator's mechanic found a dowel from the left wheel pant about halfway down the runway. "I believe this may have contributed to my slower than usual takeoff roll. The calipers and linings on the brakes were fresh, I had just had them rebuilt/replaced," the pilot wrote.

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ANTHACETORI			Occurrence Type: Accident									
Landing Facility/Approach Inf	ormation											
Airport Name	irport ID:	Airport Eleva	tion	Runway Used		Runway Length		.h	Runv	way Width		
Tri-County 48			ŀ8V	5130 Ft.	5130 Ft. MSL 15		4700			60		
Runway Surface Type: Concrete												
Runway Surface Condition: Dry												
Type Instrument Approach: Unkno	wn											
VFR Approach/Landing: Unknown												
Aircraft Information												
Aircraft Manufacturer Hildebrandt			Model/ Rutar	Series n/Defiant					Serial 039	erial Number 039		
Airworthiness Certificate(s): Exper	Airworthiness Certificate(s): Experimental (Special)											
Landing Gear Type: Retractable -	Tricycle		_									
Homebuilt Aircraft? Yes	Number of Seats: 4	mber of Seats: 4 Certified Max Gross Wt. 3300 LBS Number of						r of En	of Engines: 1			
			Engine Manufacturer: Model/Series: Lycoming O-360-A1A						Rated Power: 180 HP			
- Aircraft Inspection Information												
Type of Last Inspection			Date of Last Inspection Time S			Time Sir	since Last Inspection			Airframe Total Time		
Annual								Но	ours			Hours
- Emergency Locator Transmitter (E	ELT) Information											
ELT Installed? Yes	ELT Operate	LT Operated? No ELT Aided in Locating Accident Site?										
Owner/Operator Information												
Registered Aircraft Owner			Street A	ddress On File								
Gregory A. Benson			City							Stat	:e	Zip Code 80211
			Street A	ddress						100		00211
Operator of Aircraft	Same as Reg'd Aircraft Owner								to T	Zip Code		
Same as Reg'd Aircraft Owner				City							.e	Zip Code
Operator Does Business As:  Operator Designator Code:												
- Type of U.S. Certificate(s) Held: N	lone											
Air Carrier Operating Certificate(s):												
Operating Certificate:	Operating Certificate: Operator Certificate:											
Regulation Flight Conducted Under	: Part 91: Genera	al Aviatio	n									
Type of Flight Operation Conducted	: Personal										_	
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AVIATION

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Occurrence Date: 08/20/2002

AVIATI	Occurrence Type: Accident											
First Pilot Information												
Name	City				Sta	ate	Date of Birth	Age				
On File	On File	ile			Or	ı File	On File	36				
Sex: M Seat Occupied	wn	Certificate Number: On File										
Certificate(s): Private												
Airplane Rating(s): Multi-engine Land; Single-engine Land												
Rotorcraft/Glider/LTA: None												
Instrument Rating(s): None	e											
Instructor Rating(s): None												
Type Rating/Endorsement for	or Accident/In	cident Aircra	ft?			Cı	urrent Bier	nial Flight	t Revie	w? 04/2	2001	
Medical Cert.: Class 3	Medica	al Cert. Status	S: Valid Med	dicalno wa	nivers/lim			Date of	Last M	1edical E	xam: 05/2001	
- Flight Time Matrix	All A/C	This Make and Model	Airplane Single Engine	Airplane Mult-Engine	Night	Instrument Actual Simulated			ed	Rotorcraft	Glider	Lighter Than Air
Total Time	Total Time 574		553	20		60	-	7 66				
Pilot In Command(PIC)	484	18	466	18		57						
Instructor						_						
Last 90 Days	10	10		10		_						
Last 30 Days Last 24 Hours						$\dashv$		+				
Seatbelt Used? Yes	Chau	ldan Hanasaa	Haada Na		I To	vice	logy Perfo	rmod? Na			econd Pilot? No	
Sealbeil Osed? Tes	Snou	lder Harness	Used? NO		110	XICO	logy Fello	illea: MC	)		econd Filot? [N	)
Flight Plan/Itinerary												
Type of Flight Plan Filed: No	one											
Departure Point					s	tate	Air	port Identi	fier	Depa	rture Time	Time Zone
Same as Accident/Incide	ent Location					48V				1045		MDT
Destination State Airport Identifier												
Walsenburg						CO 4V1						
Type of Clearance: None							•					
Type of Airspace: Class G												
Weather Information												
Source of Briefing: Unknown												
Method of Briefing: Unknown												
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	ETYBOR		Occurrenc	e Type:	Acciden	ıt								
Weather Information														
WOF ID	Observation Time	Time Zone	WOF Elevati	on	WOF Distance From Accident Site					Direction From	Accident Site			
BJC	1046	MDT	5670 Ft.	. MSL	NM					Deg. Mag.				
Sky/Lowes	st Cloud Condition:			Ft. AGL					Condition of Light: Day					
Lowest Ce	eiling: Broken		8000 Ft.	AGL	Visibi	ility:	10	SM	Altii	meter:	29.95	"Hg		
Temperatu	Temperature: 30 °C Dew Point: 10 °C Wind Direction: 70 De						Dei	nsity Altitude:	8575	Ft.				
Wind Spee	ed: 10	Gusts:		Weather Condtions at Accident Site: Visual Conditions										
Visibility (F	RVR): Ft	Visibility (R'	VV)	SM	Intensity	y of Precip	pitation:							
Restriction	ns to Visibility: None													
Type of Precipitation: None														
Accident	Information													
Aircraft Da	mage: Substantial		Aircraft Fire	e: None	<u> </u>			Aircraft Exp	losio	n None				
Classificati	ion: U.S. Registered/l	J.S. Soil												
- Injury Su	mmary Matrix	Fatal Se	erious Mino	or	None	TOTAL								
First Pi	ilot				1		1							
Second	d Pilot													
Studen	nt Pilot						7							
Flight I	Instructor						7							
Check	Pilot						7							
Flight E	Engineer													
Cabin /	Attendants						7							
Other (							$\neg$							
Passer	ngers			$\neg$	1		1							
- TOTAL A	ABOARD -				2		2							
Other 0							$\neg$							
- GRANE	D TOTAL -				2		2							
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Investigator-In-Charge (IIC)

Arnold W. Scott

Additional Persons Participating in This Accident/Incident Investigation:

Robert C Bunderson Aviation Safety Inspector - Airworthiness FAA Flight Standards District Office 26805 E. 68th Ave., Suite 200 Denver, CO 80249